

**APPENDIX A**  
**PRESENTLY PENDING CLAIMS**

14. (New) A process for the cryo-preservation of a primary explant comprising the step of cryofreezing the primary explant, wherein the primary explant comprises a plant tissue that has been subjected to an induction medium for a time sufficient to induce a primary regenerating tissue, but not a somatic embryo.
15. (New) The process of claim 14, further comprising a two step incubation of the primary explant, wherein the primary explant is first incubated in a medium containing 0.4 M sucrose followed by incubating the primary explant in a medium containing 1 M sucrose.
16. (New) The process of claim 14, further comprising the step of dehydrating the primary explant prior to cryofreezing.
17. (New) The process of claim 16, wherein the dehydration step involves placing the primary explant in an air current of a laminar flow cabinet, in a stream of compressed air, or in an airtight container together with silica gel or various over-saturated salt solutions to control the relative humidity.
18. (New) The process of claim 14, further comprising the step of pre-freezing the primary explant prior to cryofreezing.
19. (New) The process of claim 18, wherein the pre-freezing temperature is between -20°C and -40°C.
20. (New) The process of claim 14, wherein the plant tissue utilized is derived from a cocoa, coffee, or carrot plant.
21. (New) The process of claim 20, wherein the plant tissue utilized is derived from *Coffea canephora* or *Coffea arabica*.
22. (New) The process of claim 20, wherein the plant tissue utilized is derived from *Theobroma cacao*.

23. (New) The process of claim 20, wherein the plant tissue utilized is derived from *Daucus carota*.
24. (New) A process for the cryo-preservation of a primary explant comprising the steps of:
- incubating a planting tissue in a regeneration medium for a time sufficient to induce a primary explant, but not a somatic embryo;
  - dehydrating the primary explant to a water content of at least 28 g/100g dwt;
  - prefreezing the primary explant to a temperature between -20°C and -40°C; and
  - cryofreezing the primary explant.
25. (New) The process of claim 24, further comprising a two step incubation of the primary explant, wherein the primary explant is first incubated in a medium containing 0.4 M sucrose followed by incubating the primary explant in a medium containing 1 M sucrose.
26. (New) The process of claim 24, wherein the dehydration step involves placing the primary explant in an air current of a laminar flow cabinet, in a stream of compressed air, or in an airtight container together with silica gel or various over-saturated salt solutions to control the relative humidity.
27. (New) The process of claim 24, wherein the plant tissue utilized is derived from a cocoa, coffee, or carrot plant.
28. (New) The process of claim 24, wherein the plant tissue utilized is derived from *Coffea canephora* or *Coffea arabica*.
29. (New) The process of claim 24, wherein the plant tissue utilized is derived from *Theobroma cacao*.
30. (New) The process of claim 24, wherein the plant tissue utilized is derived from *Daucus carota*.

31. (New) A process for the cryo-preservation of a primary explant comprising the steps of:

incubating a planting tissue in a regeneration medium for a time sufficient to induce a primary explant, but not a somatic embryo; and  
cryofreezing the primary explant.

32. (New) The process of claim 31, further comprising the step of dehydrating the primary explant to a water content of at least 28 g/100g dwt.

33. (New) The process of claim 31, further comprising the step of prefreezing the primary explant to a temperature between -20°C and -40°C.